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portance of the latter in connection with the survival of new races. Thus he writes:[4]

> The quadroon child of the mulatto and the white has a quarter tint; some of the children may be altogether darker or lighter than the rest, but they are not piebald.[5] Skin-color is therefore a good example of what I call blended inheritance. . . .
>
> Next as regards heritages that come altogether from one progenitor to the exclusion of the rest. Eye-color is a fairly good illustration of this. . . .
>
> There are probably no heritages that perfectly blend or that absolutely exclude one another, but all heritages have a tendency in one or the other direction, and the tendency is often a very strong one.

On the following page Galton remarks that

> A peculiar interest attaches itself to mutually exclusive heritages, owing to the aid they must afford to the establishment of incipient races.

He thus recognizes the invalidity of Darwin's objection to "single variations" as a factor in evolution, namely, that they would certainly be swamped by crossing with the general population.

It would, therefore, appear that in his recognition of continuity as well as discontinuity both in variation and heredity, Galton was in advance of his time, and more in accord with some of the current views.

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REPULSION IN MICE

IN the February number of the AMERICAN NATURALIST Dr. C. Little criticizes the results of my mouse-breeding experiments which I published in the *Zeitschrift für Induktive Abstammungs- und Vererbungs-lehre* Bd. VI, Heft 3. The chief point, on which he disagrees with me, is the interpretation of the results I obtained in breeding black and albino mice together.

The fact is, that in my paper on mice, I overlooked a serious error. In three sentences on page 126, relating to test matings of albinos, the words "black" and "agouti" changed places. As printed in the paper these sentences run:

> Without exception they have given *black* or equal numbers of *black* and albino young, depending upon the purity of the black used. But never has one of these albinos produced a single *agouti* young in a mating with black. Counting together the colored young of such families I get 89 *black* young.

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[4] *L. c.*, p. 12.

[5] Cases of piebaldism in such crosses are of course now well-known.

These errors were corrected in an "errata" in Band VI, heft 5, which Dr. Little unhappily did not find. The sentences should read:

> Without exception they have given *agouti,* or equal numbers of *agouti* and albino young, depending upon the purity of the black used. But never has one of these albinos produced a single *black* young in a mating with black. Counting together the colored young of such families I get 89 *agouti* young.

Professor Punnett was so kind as to draw my attention to these mistakes. They were corrected in the reprints sent out.

The facts were simply these: Albinos were bred of two sorts, with and without *G* (the gene which agoutis have more than blacks). These albinos can only be distinguished by test-mating them to blacks. The albinos with *G* (*aG*) give agouti young, if mated to black (*Ag*), the *ag* albinos give black young from such a mating. In one series, some agoutis were produced, which were heterozygous for *A* as well as for *G*(*AaGg*). Ordinarily, such agoutis, when mated inter se, produce 9 agouti (1 *AAGG,* 2 *AAGg,* 2 *AaGG,* 4 *AaGg*), 3 black (1 *aaGG,* 2 *aaGg*) and 4 albinos (1 *aaGG,* 2 *aaGg,* 1 *aagg*) in every sixteen. Mated to albinos without *G*(*ag*) the ordinary *AaGg* animals give four kinds of young, agoutis (*AaGg*), blacks (*Aagg*) and two kinds of albinos (*aaGg*) and (*aagg*) in equal numbers.

Now these particular *AaGg* animals did not produce four kinds of gametes, as expected, namely, *AG, Ag, aG* and *ag,* but only two kinds, *Ag* and *aG.* Thirty one agoutis were test-mated to *aagg* albinos. These test matings gave 181 young, of which 94 were black (*Aagg*) and 87 albino (*aaGg*). No agoutis were produced.

As a further proof, the result of breeding these agoutis inter se can be adduced. These matings gave 73 agouti (*AaGg*), 37 black (*AAgg*) and 32 albinos (*aaGG*). Of these 32 albinos, thirteen were tested by mating them to blacks. If one of them should have lacked *G,* it would have given black young. But no black young were produced. Some young were albino (when the black parent was heterozygous for *A*), but all the colored young were agouti (89 in all).

This, I hope, will make it perfectly clear, that in this series we have been dealing with a case of repulsion between the genes *A* and *G.*

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